

ABSTRACT

A reforming process of a quartz glass crucible in which the quartz glass crucible is reformed by an arc discharge generated by electrodes positioned around a rotational axis and configured to heat an inside surface of the crucible while the crucible is rotated. The process includes arranging electrodes in an electrode structure such that neighboring electrodes are positioned at regular intervals in a ring-like configuration; forming a stable ring-like arc between the neighboring electrodes, without generating a continuous arc between electrodes facing each other across a central portion of the ring-like configuration; heating the inside surface of the crucible; and removing a foreign substance located on the inside surface of the crucible or a bubble located under the inside surface of the crucible.